

## CLAIMS

What is claimed is:

1. A method for filling a muffler shell with a fibrous material comprising  
5 the steps of:
  - (a) providing an outer muffler shell;
  - (b) applying a temporary form to the outer shell to define a muffler chamber  
within the outer muffler shell;
  - (c) wetting the fibrous material by forcing moisturized compressed air into  
10 contact with the fibrous material;
  - (d) inserting the wetted fibrous material into the muffler chamber; and
  - (e) removing the temporary form from the outer muffler shell.
2. The method of claim 1 wherein the outer muffler shell of step (a) is  
15 comprised on an upper outer shell and a lower outer shell, and wherein the temporary  
form of step (b) is applied to the lower outer shell.
3. The method of claim 1 wherein the fibrous material in step (c) is  
simultaneously texturized and wetted by forcing moisturized compressed air into  
20 contact with the fibrous material.
4. The method of claim 1 wherein the inserting step (d) is accomplished by  
drawing a partial vacuum in the enclosed muffler chamber while inserting the fibrous  
material to draw the fibrous material into the enclosed muffler chamber.  
25
5. The method of claim 1 wherein the compressed air is moisturized by  
using water.

6. The method of claim 1 wherein the compressed air has sufficient moisture to wet the fibrous material to a moisture content that is within the range of from about five to about fifty percent of the weight of the combined fibrous material and moisture.

5

7. The method of claim 1 wherein the fibrous material inserted into the outer shell is covered with a layer of protective material following step (e) such that the material encases the fibrous material extending over the outer shell.

10

8. The method of claim 7 wherein the protective material used to cover the fibrous material is a fibrous glass material.

9. The method of claim 7 wherein the protective material used to cover the fibrous material is paper.

15

10. A method for filling a muffler shell with a fibrous material comprising the steps of:

(a) providing an outer muffler shell having at least one muffler chamber defined within the outer muffler shell;

20 (b) wetting the fibrous material by forcing moisturized compressed air into contact with the fibrous material; and

(c) inserting the wetted fibrous material into the muffler chamber

25 11. The method of claim 10 wherein the fibrous material in step (b) is simultaneously texturized and wetted by forcing moisturized compressed air into contact with the fibrous material.

12. The method of claim 10 wherein the compressed air is moisturized by using water.

13. The method of claim 10 wherein the compressed air has sufficient  
5 moisture to wet the fibrous material to a moisture content that is within the range of from about five to about fifty percent of the weight of the combined fibrous material and moisture.

14. The method of claim 10 wherein the fibrous material inserted into the  
10 outer muffler shell is covered with a layer of protective material following step (c) such that the material encases the fibrous material extending over the outer muffler shell.

15. The method of claim 14 wherein the protective material used to cover  
15 the fibrous material is a fibrous glass material.

16. The method of claim 14 wherein the protective material used to cover the fibrous material is paper.

20 17. A method for filling a muffler shell with a fibrous material comprising the steps of:

(a) providing a muffler shell having a lower outer shell;

(b) applying a temporary form to the lower outer shell to define a muffler chamber within the lower outer shell;

25 (c) texturizing the fibrous material by forcing compressed air through the fibrous material;

(d) wetting the texturized fibrous material by applying a fluid to the texturized fibrous material;

(e) inserting the texturized and wetted fibrous material into the enclosed muffler chamber; and

(f) removing the temporary form from the lower outer shell.

5           18. The method of claim 17 wherein the inserting step (e) is accomplished by drawing a partial vacuum in the enclosed muffler chamber while inserting the fibrous material to draw the fibrous material into the enclosed muffler chamber.

10           19. The method of claim 17 wherein the fluid used to wet the texturized fibrous material is water.

15           20. The method of claim 17 wherein the fluid is applied to the texturized material such that the fibrous material is wetted to a moisture content that is within the range of from about five to about fifty percent of the weight of the combined fibrous material and fluid.

20           21. The method of claim 17 wherein the fibrous material inserted into the lower outer shell is covered with a layer of protective material following step (f) such that the material encases the fibrous material extending over the lower outer shell.

22. The method of claim 21 wherein the protective material used to cover the fibrous material is a fibrous glass material.

25           23. The method of claim 21 wherein the protective material used to cover the fibrous material is paper.

24. A method for filling a muffler shell with a fibrous material comprising the steps of:

- (a) providing a muffler shell having a lower outer shell;
- (b) applying a temporary form to the lower outer shell to define a muffler chamber within the lower outer shell;
- (c) simultaneously texturizing and wetting the fibrous material by forcing moisturized compressed air into contact with the fibrous material;
- (d) inserting the wetted fibrous material into the muffler chamber; and
- (e) removing the temporary form from the lower outer shell.

25. The method of claim 24 wherein the inserting step (d) is accomplished by drawing a partial vacuum in the enclosed muffler chamber while inserting the fibrous material to draw the fibrous material into the enclosed muffler chamber.

26. The method of claim 24 wherein the compressed air is moisturized by using water.

27. The method of claim 24 wherein the compressed air has sufficient moisture to wet the fibrous material to a moisture content that is within the range of from about five to about fifty percent of the weight of the combined fibrous material and moisture.

28. The method of claim 24 wherein the fibrous material inserted into the lower outer shell is covered with a layer of protective material following step (e) such that the fibrous material extending over the lower outer shell is encased by the material.

29. The method of claim 28 wherein the protective material used to cover the fibrous material is a fibrous glass material.

30. The method of claim 28 wherein the protective material used to cover  
5 the fibrous material is paper.